

CLAIMS

1. A process of preparing beverages from beverage preparations, comprising the steps of:
 - supplying an amount of liquid to a capsule (1) containing a beverage preparation to prepare a beverage,
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 - forming a dispensing opening (11) for said solubilised product, said opening having a dispensing area, through which said beverage can flow from inside said capsule to outside said capsule
 - dispensing the thus obtained beverage from said capsule through said dispensing opening,
10wherein, the area of said dispensing opening (11) changes at least twice by increasing and decreasing during said step of dispensing the beverage from said capsule, before all said beverage has been dispensed.
2. The process according to claim 1, comprising a further step of increasing
15 said dispensing area (11).
3. The process according to claims 1 or 2, wherein said changes of said dispensing opening (11) area are obtained according to the pressure built up within said capsule by the liquid fed to the capsule.
4. The process according to claim 3, wherein said dispensing opening (11) is
20 formed between a puncturing member (9) fitted in one wall (F) of said capsule (1) and the edge (3) of said wall which surrounds said puncturing member, and in that the edge of said wall (F) is substantially adherent to said puncturing member (9) at the beginning of the step of feeding the liquid into the capsule, moves away from said member (9) in order to form said
25 dispensing opening (11) upon pressurization of said capsule and returns to an at least partially closed position after an amount of beverage has been dispensed from the capsule but before all the beverage has been dispensed.
5. The process according to claim 3, wherein said dispensing opening (11) is formed between one wall of said capsule (F), a movable outlet lid portion of
30 said wall (1b) and an opening element (9a) of said movable outlet lid portion (1b) and wherein said outlet lid portion (1b) is in a closed position at the

beginning of the step of feeding liquid to the capsule, moves into an open position after said capsule has been pressurized by said liquid, and moves to an at least partially closed position after an amount of beverage is dispensed from the capsule but before all the beverage has been dispensed.

- 5 6. A process according to any previous claim 1 to 5, wherein said opening is formed when the pressurized liquid inside said capsule pushes an outlet lid portion (1b, 16) of the capsule bottom wall (F) outwardly said capsule.
7. A capsule (1) for the preparation of beverages from soluble preparations after a liquid has been fed to said capsule, said capsule having a dispensing wall (F) and a dispensing wall lid portion (1b, 16) which can be open to form a dispensing opening (11) for said beverage, characterised in that it comprises means for varying the area of said dispensing opening (11) during the step of dispensing the beverage from said capsule.
- 10 8. The capsule according to claim 7, wherein said means for varying said dispensing opening area comprise hinge means (7, 4a, 17).
- 15 9. The capsule of claim 8, wherein said hinge means are provided on the wall (F) of the capsule in which said opening (11) is formed, to impart an oscillating movement to said wall (F) during said dispensing step.
- 20 10. The capsule according to one of the claims 7 to 9, wherein said hinge means are hinges (17) connecting said outlet lid portion (1b, 16) to said dispensing wall (F), said hinges (17) biasing said lid portion (1b, 16) to return to an at least partially closed position after having been stressed into the open position before all the beverage has been dispensed.
- 25 11. The capsule according to any claim 7 to 10, wherein at least part of said dispensing wall (F) has a rigidity within the range of 10 to 55 N/mm measured by compression with a punch (6) and deflection set to 3 mm.
- 30 12. A capsule (1) for the preparation of beverages from soluble preparations after a liquid has been fed into said capsule, said capsule having a dispensing wall (F) including a outlet lid portion (1b, 16) to form a dispensing opening (A) for said beverage, characterised in that at least part of said dispensing wall (F) has a rigidity within the range of 10 to 55 N/mm measured

by compression with a punch and deflection set to 3 mm.

13. The capsule according to any claim 8 to 11, wherein the thickness of said dispensing wall (F) in the area surrounding (8) said outlet lid portion (1b) is greater than the thickness of said bottom wall adjacent (7) the capsule side walls (L, 1a).

5 14. The capsule according to claim 13, wherein said dispensing wall (F) is inclined convergent towards said lid portion (1b) and wherein the angle of inclination (α) of said wall towards said lid portion is within the range of 1 to 15 degrees.

10 15. The use of a capsule according to any claim 7 to 14 with a dispensing group comprising a puncturing member (9) which is housed within said dispensing opening (11) during said dispensing step, wherein the size of said puncturing member portion engaging said bottom wall (F) of the capsule (1) is equal to or greater than the size of said openable portion (1b) of the bottom wall (F).

15 16. The use of a capsule according to claim 15 with a dispensing group comprising an opening member (9a) engaging said outlet lid portion (1b, 16) opening when said capsule is pressurised during said feeding step in order to form a dispensing opening.

20 17. A device for the preparation of beverages from soluble preparations, comprising capsule receiving means in accordance with one of the claims 7 to 14 and a puncturing member (9) for perforating the dispensing wall (F) of said capsule and forming a dispensing opening (11), characterised in that the size of said puncturing member (9) portion engaging said capsule bottom wall (F) is substantially equal to or greater than the size of said lid portion (1b) of the bottom wall (F).

25 18. A capsule (C) for preparing a beverage from food products (23) housed within it, according to any claim 7 to 13, further comprising a filter element (13,14,24).

30 19. A capsule (C) according to claim 18, wherein said filter element is spaced from the bottom wall (F) of said capsule.

20. A capsule (C) according to claim 18 or 19, wherein said outlet lid portion is open outwardly.